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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,614	10/17/2006	Gerald Sugerman	VOC 422US	5708

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MYERS WOLIN, LLC
100 HEADQUARTERS PLAZA
North Tower, 6th Floor
MORRISTOWN, NJ 07960-6834

EXAMINER

REDDY, KARUNA P

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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03/10/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent@myerswolin.com

Office Action Summary	Application No. 10/551,614	Applicant(s) SUGERMAN ET AL.	
	Examiner KARUNA P. REDDY	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7 and 9-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7 and 9-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on 12/10/2007.
Applicants amended claims 1, 5, 7 and 9-17; and cancelled claims 19-30.
Claims 1, 3-5, 7, 9-18 are currently pending in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ

619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1, 3-5, 7 and 10-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-5, 7 and 10-18 of copending Application No. 10/853,516. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are both drawn to amine free compositions comprising substantially similar components with the present claims using a combination of one or more of non-volatile, unsaturated ester, ethers, or ether-esters. The open language i.e. recitation of term "comprising" in copending application allows for more than one non-volatile, unsaturated ester, ethers, or ether-esters in the composition.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1, 3-5, 7 and 10-18 are directed to an invention not patentably distinct from claims 1, 3-5, 7 and 10-18 of commonly assigned 10/853,516. Specifically, see the discussion set forth in paragraph 4 above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 10/853,516, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claim Objections

6. Claim 3 is objected to because of the following informalities: Claim 3 recites “organornetallic”. Appropriate correction to the typographical error is required.

Claim Rejections - 35 USC § 112

7. Claims 1, 3-5, 7 and 9-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Present claims recite “an amine free” and “in the absence of an amine” and there is no support for this in the specification as originally filed.

Claim Rejections - 35 USC § 102

8. Claims 1, 3-5, 7 and 9-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Van De Mark et al (US 7, 160, 945 B1).

Van De Mark et al disclose a film forming composition containing polyunsaturated ester as a coalescent aid (column 1, lines 12-14). Among the objectives is a coalescent aid for use in a water-borne film forming composition

wherein the coalescent aid is not classified as a volatile organic compound (column 2, lines 3-6). The water-borne film-forming compositions contain a continuous aqueous phase and a dispersed film-forming phase. In general they may be formulated to function as a paint, sealant, adhesive or other coating (column 2, lines 44-48). The dispersed phase comprises a (i) particulate polymer or an emulsified liquid pre-polymer, (ii) a coalescent aid and optionally (iii) one or more additives (column 3, lines 18-20). Preferred particulate polymers are generally either of the addition type or of the condensation type. Suitable particulate polymers of the addition type include polymerization and copolymerization products of styrene, vinyl acetate and acrylates. Suitable condensation type particulate polymers include urethane, polyester (column 3, lines 46-58). The coalescent aid of present invention preferably comprises an ester having the formula RCOOX wherein R is hydrocarbyl or substituted hydrocarbyl; X is hydrocarbyl or substituted hydrocarbyl, and at least one of R and X contains two or more aliphatic unsaturated carbon-carbon bonds (column 4, lines 8-18). In one embodiment X is $\text{X}'\text{-OH}$ (column 4, lines 63-64). In one embodiment, the coalescent aid comprises a polyunsaturated ester with at least one of the esters being ethylene glycol monobutyl ether or 2,2,4-trimethyl-1,3-pentanediol monobutyrate (column 5, lines 12-15). The amount of coalescent aid needed to assist in film formation depends on the viscosity of the film-forming composition, the temperature at which the composition is being applied, the glass transition temperature of the film-former and the minimum film formation

temperature of the film-former. In general, the amount of coalescent will be proportional to the amount and type of resin used with ratios in the range of 0.1 wt% to about 50 wt% (column 6, lines 33-36, lines 65-67; column 7, lines 1-3). The film forming composition of the present invention may also contain various conventional additives and include pH modifiers such as N,N-dimethylamine, surfactants, and driers such as cobalt carboxylate (column 7, lines 65-66). See example 1, coalescent efficiency is tested using a low T_g polymer with various soybean oil esters.

Therefore, Van De Mark et al anticipate the present claims.

Claim Rejections - 35 USC § 103

9. Claims 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Van De Mark et al (US 7, 160, 945 B1) in view of Sugerman et al (WO 99/32563).

The discussion with respect to Van De Mark et al in paragraph 8 above is incorporated here by reference.

Van De Mark et al is silent with respect to organometallic based surfactants.

However, Sugerman et al teach low VOC latex coalescent which are further enhanced by the substitution of hypersurfactants, in place of conventional soaps and/or dispersants and/or detergents (abstract). Among the surfactants found to be useful are certain organometallics based on tetravalent titanium or

zirconium which have been found to contribute significantly to substrate adhesion and improved corrosion resistance on wood, metallic and ceramic substrates, and to be particularly useful in maximizing color intensities of carbon black, azo and phthalocyanine based pigments (page 6, line 26; page 7, lines 2-7).

Therefore, it would have been obvious to replace the conventional surfactants, contemplated by Van De Mark et al, with organometallic surfactants based on tetravalent titanium or zirconium of Sugerman et al, for above mentioned advantages.

Response to Arguments

10. Applicant's arguments, see page 6, lines 7-17, filed 12/10/2007, with respect to objection have been fully considered and are persuasive. The objection of claim 9 has been withdrawn.

11. Applicant's arguments with respect to rejection of claims 1, 3-5, 7, 9-20 have been considered but are moot either in view of the new ground(s) of rejection or cancellation of claims.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARUNA P. REDDY whose telephone number is (571)272-6566. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Karuna P Reddy/
Examiner, Art Unit 1796

/VASUDEVAN S. JAGANNATHAN/
Supervisory Patent Examiner, Art Unit 1796